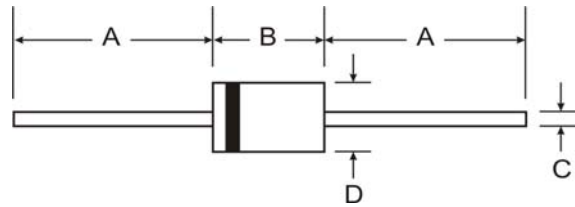


## Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse Capacitance
- **Lead Free Finish, RoHS Compliant (Note 2)**



## Mechanical Data

- Case: DO-35
- Case Material: Glass
- Moisture Sensitivity: Level 1 per J-STD-020C
- Leads: Solderable per MIL-STD-202, Method 208
- Terminals: Finish — Matte Tin. Solderable per MIL-STD-202, Method 208 (E3)
- Polarity: Cathode Band
- Marking Information: See Page 2
- Ordering Information: See Page 2
- Weight: 0.13 grams (approximate)

DO-35		
Dim	Min	Max
A	25.40	—
B	—	4.00
C	—	0.60
D	—	2.00
All Dimensions in mm		

## Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	SD101A	SD101B	SD101C	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$				
Working Peak Reverse Voltage	$V_{RWM}$	60	50	40	V
DC Blocking Voltage	$V_R$				
RMS Reverse Voltage	$V_{R(RMS)}$	42	35	28	V
Forward Continuous Current (Note 1)	$I_{FM}$		15		mA
Non-Repetitive Peak Forward Surge Current @ $t \leq 1.0\text{s}$	$I_{FSM}$		50		mA
@ $t = 10\mu\text{s}$			2.0		A
Power Dissipation (Note 1)	$P_d$		400		mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$		375		$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$		-65 to +175		$^\circ\text{C}$

## Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition		
Maximum Forward Voltage Drop	$V_{FM}$	—	SD101A	0.41	V	$I_F = 1.0\text{mA}$	
			SD101B	0.40		$I_F = 1.0\text{mA}$	
			SD101C	0.39		$I_F = 1.0\text{mA}$	
			SD101A	1.00		$I_F = 15\text{mA}$	
			SD101B	0.95		$I_F = 15\text{mA}$	
			SD101C	0.90		$I_F = 15\text{mA}$	
Maximum Peak Reverse Current	$I_{RM}$	—	200	nA	$V_R = 50\text{V}$		
					$V_R = 40\text{V}$		
					$V_R = 30\text{V}$		
Total Capacitance	$C_T$	—	2.0	pF	$V_R = 0\text{V}, f = 1.0\text{MHz}$		
						SD101B	2.1
						SD101C	2.2
Reverse Recovery Time	$t_{rr}$	—	1.0	ns	$I_F = I_R = 5.0\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$		

- Notes:
1. Valid provided that leads are kept at ambient temperature.
  2. EC Directive 2002/95/EC (RoHS) revision 13.2.2003. Glass and high temperature solder exemptions applied where applicable, see EU Directive Annex Notes 5 and 7.

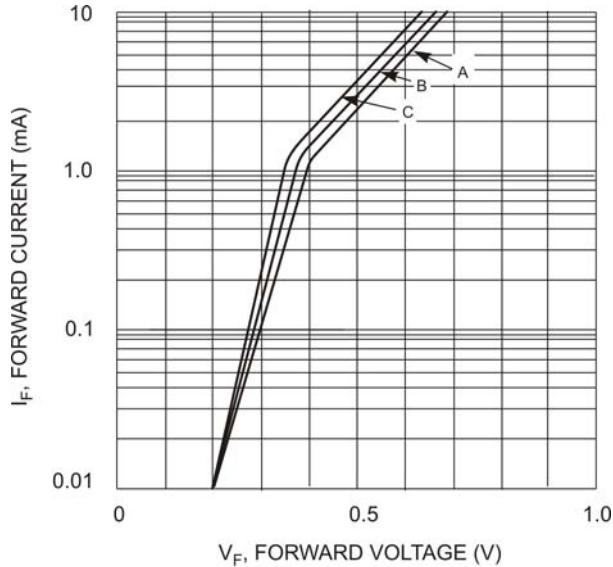


Fig. 1 Typical Forward Characteristics

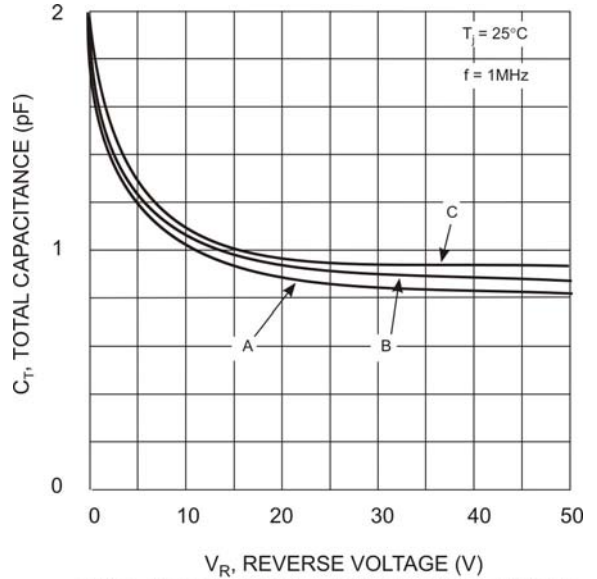


Fig. 2 Typical Total Capacitance vs Reverse Voltage

## Ordering Information (Note 3)

Device	Packaging	Shipping
SD101A-A	DO-35	10K/Ammo Pack
SD101A-T	DO-35	10K/Tape & Reel, 13-inch
SD101B-A	DO-35	10K/Ammo Pack
SD101B-T	DO-35	10K/Tape & Reel, 13-inch
SD101C-A	DO-35	10K/Ammo Pack
SD101C-T	DO-35	10K/Tape & Reel, 13-inch

Notes: 3. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02008.pdf>.

### IMPORTANT NOTICE

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. Diodes Incorporated does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

### LIFE SUPPORT

Diodes Incorporated products are not authorized for use as critical components in life support devices or systems without the expressed written approval of the President of Diodes Incorporated.